

### COMPRESSOR DEFINITION

Designation	NT 6222GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	922KD09

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[ V / Hz ]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	25.2	[kgf/cm <sup>2</sup> ] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm <sup>2</sup> ] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	17.39	[cm <sup>3</sup> ] (1.061 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	17.2	[kg] (37.92 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	9660C-475-187	
3 Start capacitor	88-108(330)	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T0920/G9	
6 Start winding resistance	6.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.58	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	33.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ASHRAEHBP46</b> <b>Fan</b>		Evaporating temperature (Condensing temperature		<b>7.2°C (44.96°F)</b> <b>54.4°C (129.92°F)</b>	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
9992	2518	2928	1556	8.78	82.26	6.42	1.62	1.88

### E - PERFORMANCE - CURVES

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>35°C (+95°F)</b> )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4957	1249	1453	769	5.06	31.48	6.44	1.62	1.89
-15	(+ 5)	6135	1546	1798	837	5.36	39.15	7.34	1.85	2.15
-10	(+14)	7549	1902	2212	907	5.68	48.47	8.33	2.10	2.44
-5	(+23)	9176	2312	2689	978	6.00	59.37	9.38	2.36	2.75
0	(+32)	10994	2770	3221	1048	6.32	71.77	10.49	2.64	3.07
+5	(+41)	12979	3271	3803	1117	6.64	85.61	11.62	2.93	3.40
+10	(+50)	15108	3807	4427	1184	6.95	100.82	12.76	3.22	3.74

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>45°C (+113°F)</b> )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4147	1045	1215	825	5.27	29.05	5.04	1.27	1.48
-15	(+ 5)	5170	1303	1515	909	5.65	36.44	5.69	1.43	1.67
-10	(+14)	6400	1613	1875	996	6.04	45.42	6.42	1.62	1.88
-5	(+23)	7815	1969	2290	1084	6.46	55.91	7.20	1.81	2.11
0	(+32)	9391	2367	2752	1173	6.88	67.85	8.00	2.02	2.34
+5	(+41)	11107	2799	3255	1261	7.30	81.17	8.81	2.22	2.58
+10	(+50)	12939	3261	3791	1346	7.73	95.80	9.62	2.42	2.82

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>55°C (+131°F)</b> )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3388	854	993	890	5.46	26.63	3.80	0.96	1.11
-15	(+ 5)	4250	1071	1245	992	5.92	33.67	4.28	1.08	1.26
-10	(+14)	5291	1333	1550	1098	6.41	42.23	4.82	1.21	1.41
-5	(+23)	6489	1635	1901	1206	6.93	52.24	5.38	1.36	1.58
0	(+32)	7820	1971	2291	1315	7.46	63.65	5.95	1.50	1.74
+5	(+41)	9262	2334	2714	1424	8.00	76.37	6.51	1.64	1.91
+10	(+50)	10792	2720	3162	1530	8.55	90.34	7.04	1.77	2.06

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.7 +0.25/-0.25	[mm]	(0.500" +0.010"/-0.010")
3.1.1 Material	Steel		
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
3.3 PROCESS	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		